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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,802	01/28/2000	Jong Hoon Yi	2658-0183P	1395

2292 7590 06/16/2004

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

CHUNG, DAVID Y

ART UNIT PAPER NUMBER

2871

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/492,802

Applicant(s)

YI ET AL.

Examiner

David Y. Chung

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-28 is/are pending in the application.
- 4a) Of the above claim(s) 10-22, 26 and 28 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23 and 24 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 7-9 and 25 is/are rejected.
- 7) ☒ Claim(s) 3, 6 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of group I in the reply filed on March 30, 2004 is acknowledged. The traversal is on the ground(s) that the examiner has examined all of the claims of the invention in previous office actions and that no undue burden on the examiner exists. This is not found persuasive because applicant's amendment to claims 10 and 26 added a feature to groups II and III not found in group I, specifically barrier lines formed in a single direction. Groups I and III already contained features not found in group II, specifically transistor details. The combination-subcombination restriction was made between groups I, II and III based on the separate search required for the aforementioned features, as evidenced by their different classification.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 7-9 and 25 rejected under 35 U.S.C. 102(e) as being anticipated by Izumi (U.S. 6,417,898).

As to claim 1, Izumi discloses a liquid crystal display device with the color filter disposed on the active matrix substrate. See figure 1. Note scanning line 6, signal line 7, and pixel electrode 9. Note TFT 8, comprising: gate electrode 21, gate insulating film 22, semiconductor layer 23, source electrode 24 and drain electrode 25. Insulating layer 11 is interpreted as being a barrier rib during formation of the color filters as shown in figures 4(a)-4(d). Izumi discloses in column 6, lines 37 – 52 that various methods including ink jetting can be used to form the color filter. Note the gate insulating film 22, which acts as a protective layer. The color filter is formed over this protective layer.

As to claim 2, Izumi discloses that the insulating layer 11 is produced by material such as SiN or acrylic resin. See column 5, lines 1 – 7. An acrylic resin insulating layer is a low reflective layer.

As to claim 4, Izumi discloses that the insulating layer 11 in figure 1 can be replaced with a black matrix 31 as shown in figure 8. See column 9, lines 35-55.

As to claims 7 and 8, figure 2 of Izumi shows that the insulating layer 11 has stripe-shaped portions arranged so as to overlap both the data lines and gate lines.

Furthermore, these stripe-shaped portions define column areas that include the pixel cells in which the color filters are formed.

As to claim 9, all liquid crystal displays inherently have a second substrate opposing the first substrate, with liquid crystal between the two substrates.

As to claim 25, each limitation recites forming a specific structural element shown in figure 1 of Izumi. The claims are therefore anticipated.

Response to Arguments

Applicant's arguments filed December 10, 2003 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the feature upon which applicant relies (i.e., color filter formed directly on the protective layer) is not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The ink-jet color filter is not interpreted as being formed directly on the protective layer because this is not explicitly recited in claim 1.

Allowable Subject Matter

Claims 23 and 24 allowed, as previously indicated.

Claims 3 and 6 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, as previously indicated.

Claim 27 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art did not teach or suggest a separate gate insulation film, wherein the protective layer is disposed between the gate insulation film and the ink-jet color filter.

Conclusion

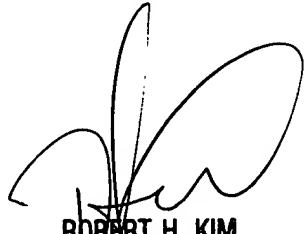
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Chung whose telephone number is (571) 272-2288. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:00 pm.



ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800